Climate Action Through Youth-Led Engagement

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The Youth Climate Ambassadors



Anya Gandavadi



Devin Guevara



Natalie Hur



Maia Mendoza



Heyby Palacios

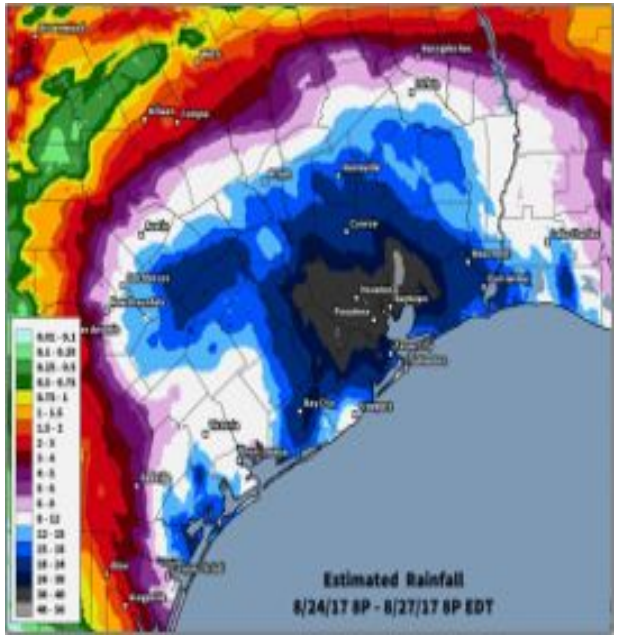


Evelina Torres



Agenda

- Introduction
- Houston's Worsening Climate
- Houston's Commitment to Climate Action
- The Houston Climate Action Plan
- Ambassador Outreach and Engagement
- Findings
- Key Takeaways
- Recommended Next Steps



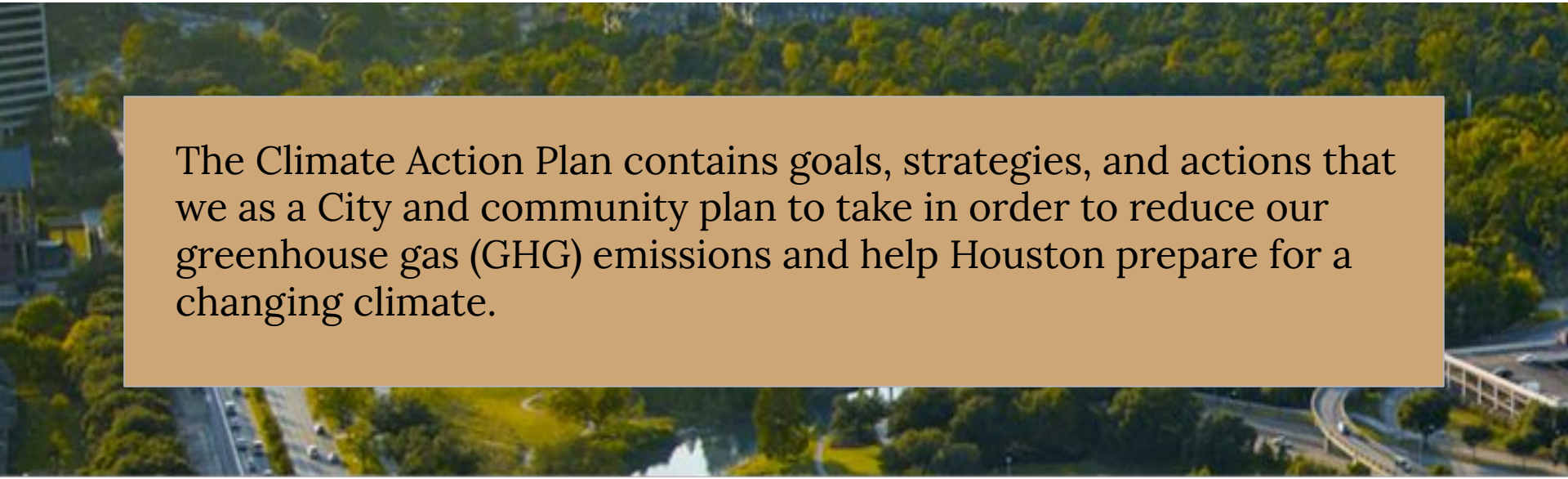


Houston's Worsening Climate

Houston's Commitment to Climate Action

- **June 1, 2017**
  - The U.S. withdraws from the 2015 Paris Agreement
- **June 24, 2017**
  - Mayor Turner, co-chair of Climate Mayors, commits to adopt Paris Agreement goals in Houston
- **2017**
  - As a result, Mayor Turner commissioned the City's Office of Sustainability to create Houston's first climate action plan
- **April 22, 2020**
  - The Houston Climate Action Plan was launched

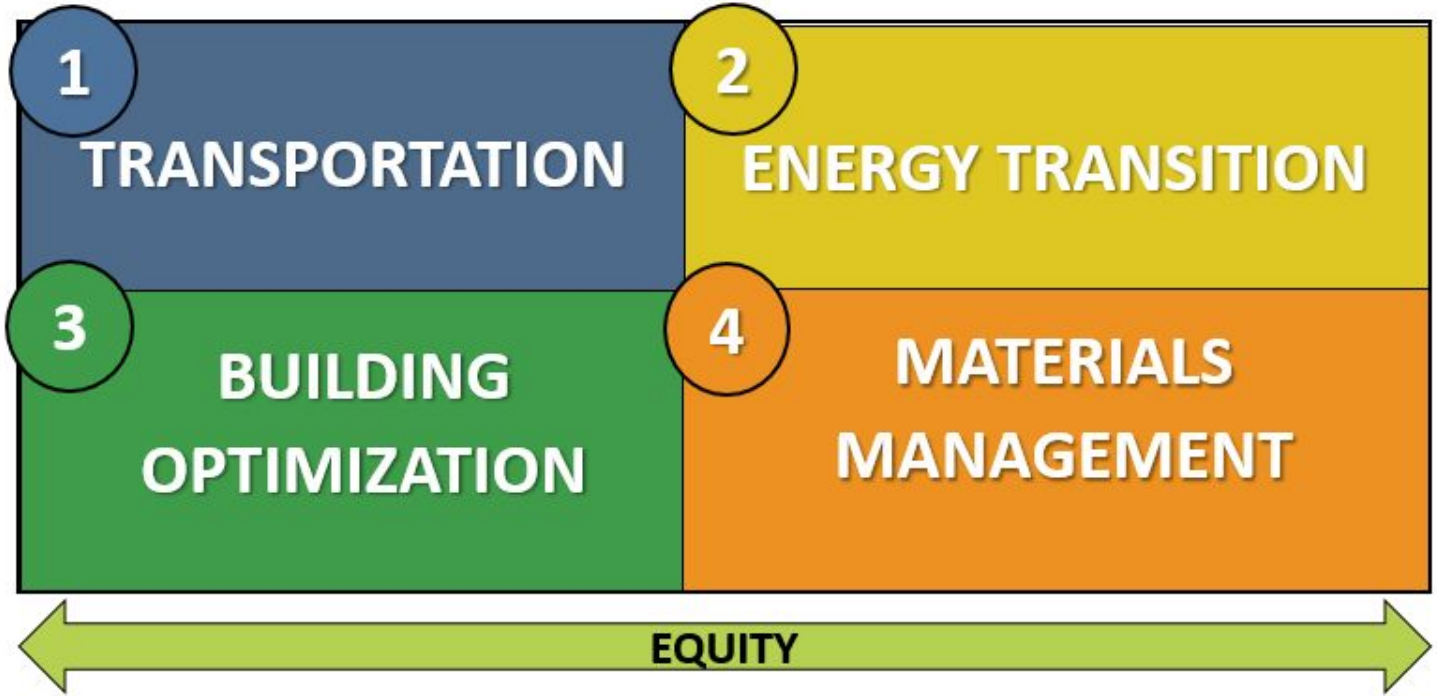
Houston Climate Action Plan (HCAP)



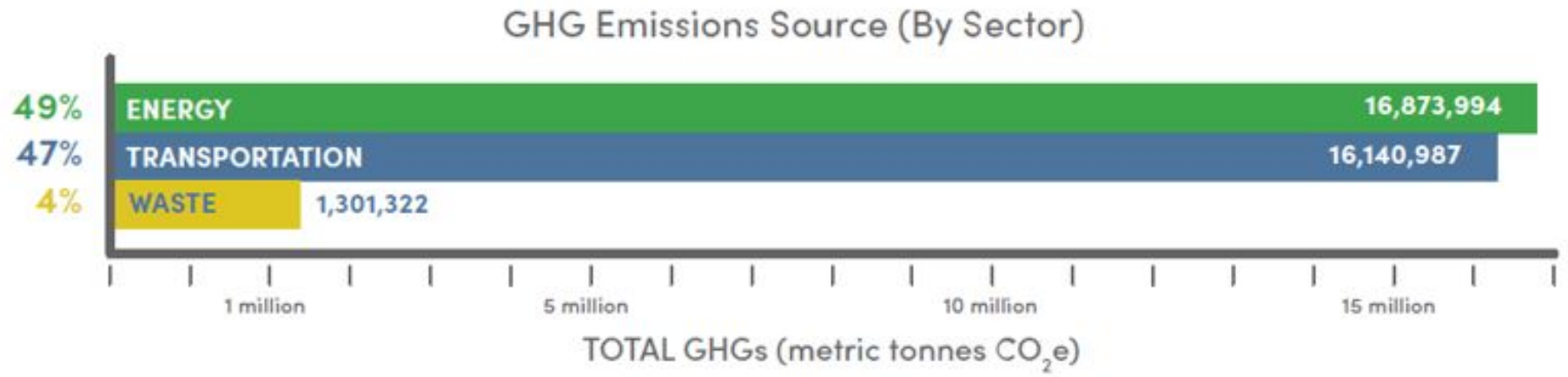
The Climate Action Plan contains goals, strategies, and actions that we as a City and community plan to take in order to reduce our greenhouse gas (GHG) emissions and help Houston prepare for a changing climate.

Houston Climate Action Plan (cont'd)

LEADING BY EXAMPLE



Houston's Greenhouse Gas (GHG) Emissions Baseline (2014)



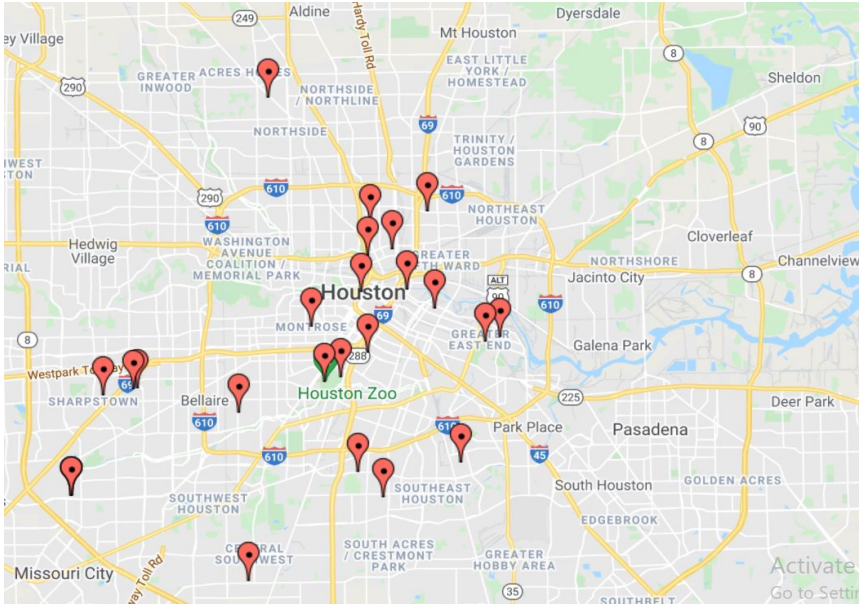
Ambassador Outreach and Engagement

- Mayor Sylvester Turner and the Office of Sustainability recognized the need for community outreach
- The Youth Climate Ambassadors were formed to serve as a link between Houstonians from Complete Communities
- Traveled across Houston and had one on one conversations with members from targeted communities



Locations Visited

- In total, we visited 22 different locations
- 12 events attended
- Interacted with about 400 Houstonians
- About 400 flyers distributed
- About 100 of engagement items were handed to community members



Houston Complete Communities

HOUSTON CLIMATE ACTION PLAN

FOCUS AREAS

TRANSPORTATION
- Transit-oriented and walkable communities
- Vehicle electrification

ENERGY TRANSITION
- Renewable energy generation
- Green infrastructure and technology

BUILDING OPTIMIZATION
- Energy efficiency
- Operations and maintenance

MATERIALS MANAGEMENT
- Landfill waste reduction
- Composting and recycling

PURPOSE

The Houston Climate Action Plan provides evidence-based measures to reduce greenhouse gas emissions and address the negative impacts of climate change. The plan demonstrates how the City will mitigate today's climate hazards and contribute to the global effort to reduce emissions.

Take our "Green" Survey

DID YOU KNOW?
Greenhouse gases are heat-trapping gases in the atmosphere
THAT CAUSE...
Climate Change, a long-term change in global or regional climate patterns
WHICH IS WHY WE NEED...
Sustainable solutions that reduce emissions and improve quality of life

HOUSTON CLIMATE ACTION PLAN

ÁREAS DE ENFOQUE

TRANSPORTE
- Comunidades transitables
- Electrificación de vehículos

TRANSICIÓN ENERGÉTICA
- Desarollo de energías renovables
- Infraestructura y tecnología verde

OPTIMIZACIÓN DE EDIFICIOS
- Eficiencia energética
- Operaciones y mantenimiento

MANTENIMIENTO DE DESPERDICIO
- Reducción de residuos en vertederos
- Abono orgánico y reciclaje

PROPÓSITO

El Plan de Acción Climatico de Houston proporciona medidas para reducir la emmission de gases de efecto invernadero al igual que medidas que previenen los efectos negativos del cambio climatilogico. El plan demostrará como la cuidad se adaptará para mejor mitigar los desafios climatologicos que enfrenta la cuidad hoy y en el futuro.

Toma nuestra encuesta ecológica

¿SABÍAS?
Gases invernaderos atrapan calor en la atmósfera
ESTO CAUSA...
Un cambio climatico global durara por décadas.
Para parar esto
SE REQUIRE...
Energia renovable que no contamina la atmósfera con gases de efecto invernadero, como energía solar or energía eólica

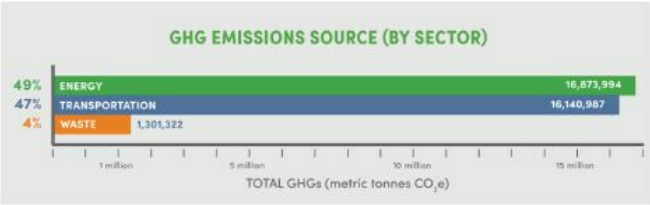
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HOUSTON CLIMATE ACTION PLAN SUMMARY

What is the Climate Action Plan?

The Houston Climate Action Plan (HCAP) establishes how the city will achieve carbon neutrality by 2050 and remain consistent with the 2015 Paris Climate Accords. The objective is to fulfill Houston's role in climate change mitigation and build the city's resilience to climate disasters through internal city policies and community organizing efforts.

Major Plan Components



Houston's greenhouse gas emissions (GHG) originate from the energy sector (49%), transportation (47%), and waste management (4%). HCAP is divided into 4 sections to mitigate emissions from these sources, and they are:



TRANSPORTATION	TARGET
Goal 1: Shift regional fleet to electric and low-emission vehicles.	1 Convert non-emergency, light-duty municipal fleet to 100% EV by 2030.
Goal 2: Reduce vehicle miles traveled (VMT) per capita.	2 Reduce VMT per capita 20% by 2050.
Goal 3: Provide equitable and safe mobility choices.	3 Zero traffic-related fatalities and serious injuries on Houston streets by 2030. 500 miles of high-comfort bike lanes by 2025.
ENERGY TRANSITION	**TARGET**
Goal 1: Grow Houston's investment in renewable and resilient energy.	4 5 million MWh local solar per year by 2050.
Goal 2: Make Houston the leader in carbon capture technology and energy innovation.	5 Attract or incubate 50 Energy 2.0 companies in Greater Houston by 2025.
Goal 3: Restore, protect, and enhance Houston's natural ability to capture and store carbon.	6 4.6 million new native trees planted by 2030.
BUILDING OPTIMIZATION	**TARGET**
Goal 1: Reduce building energy use and maximize savings.	7 Adopt the 2021 ICC model building code by 2025 with a minimum 5-year update.
Goal 2: Expand investment in energy efficiency.	8 Double the current number of PACE projects by 2025.
Goal 3: Invest in skilled local jobs to optimize building operations.	9 70% of non-residential buildings operated by trained building operator by 2030.
MATERIALS MANAGEMENT	**TARGET**
Goal 1: Reduce waste and transform the circular economy.	10 Reduce residential waste 50% by 2040.
Goal 2: Optimize waste operations and create power from waste.	11 Convert municipal solid waste fleet to low-emission vehicles by 2030.
Goal 3: Ensure safe and cost-effective long-term disposal capacity.	12 Adopt Long Range Solid Waste Plan in 2020.

Implementation

The city and the Youth, Equity, Transportation, Building Optimization, Materials Management, and Energy Transition community working groups will work together to implement HCAP.

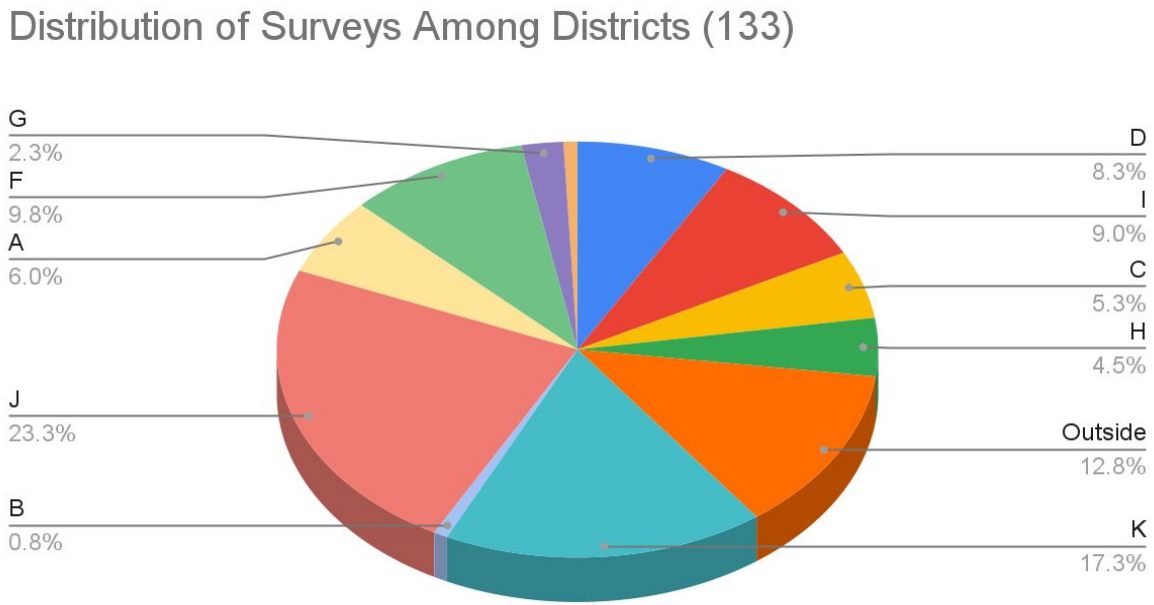
An example of a city action to advance Energy Transition is goal E1.1.3:
"Develop and enforce standards to accommodate solar and battery installation in new commercial and industrial buildings"

An example of a working group action to advance curb Transportation emissions is Goal T1.1.3:
"Work with EVolve Houston Coalition to advance EV awareness, availability, and affordability across public and private sectors"

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Survey Findings

- 133 surveys collected in both English and Spanish
- Surveys taken between July 13th and August 1st
- Distributed across the Houston area, taken from every district in Houston



Our Demographics Reached: Age

Under 18	16
18-34	42
35-54	21
55-74	18
75 or older	3

English

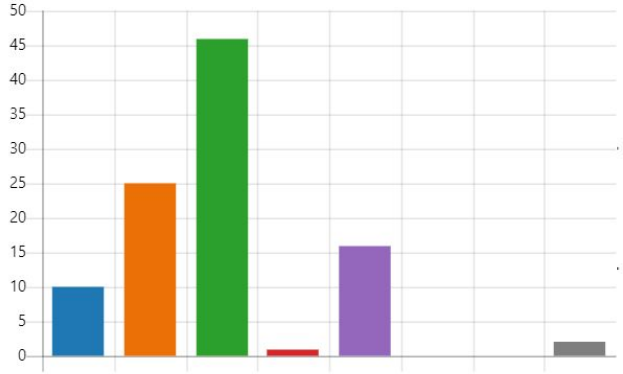


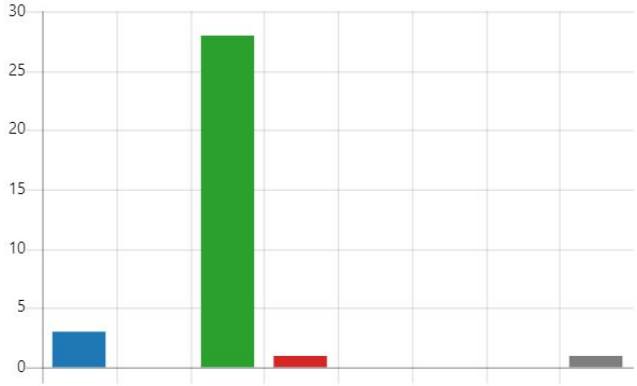
Spanish



Our Demographics Reached: Race

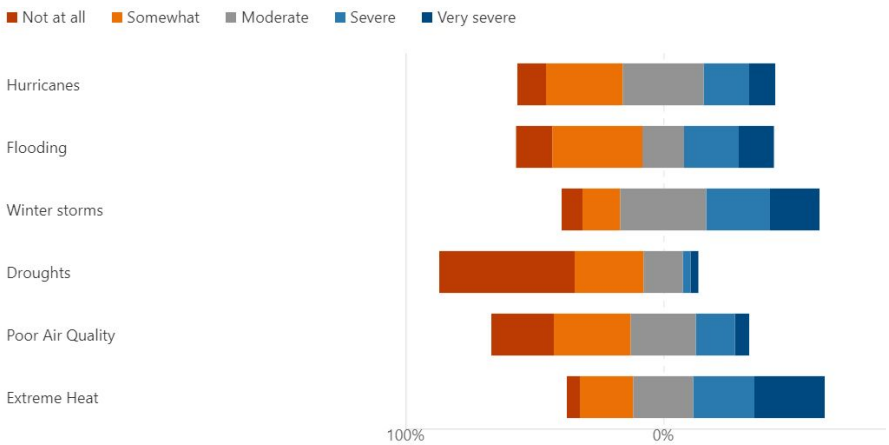
	English	Spanish
Non-Hispanic White	10	3
Black / African American	25	0
Latino/a/x	46	28
Middle Eastern / North African	1	1
Asian	16	0
Pacific Islander / Native Hawai...	0	0
Indigenous / Native American	0	0
Other	2	1



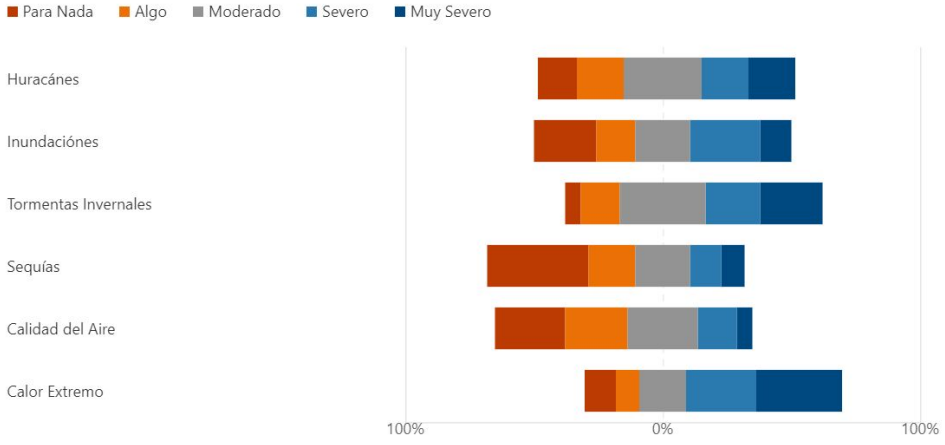


To what degree have these disasters affected you and your family in the past 20 years?

English results

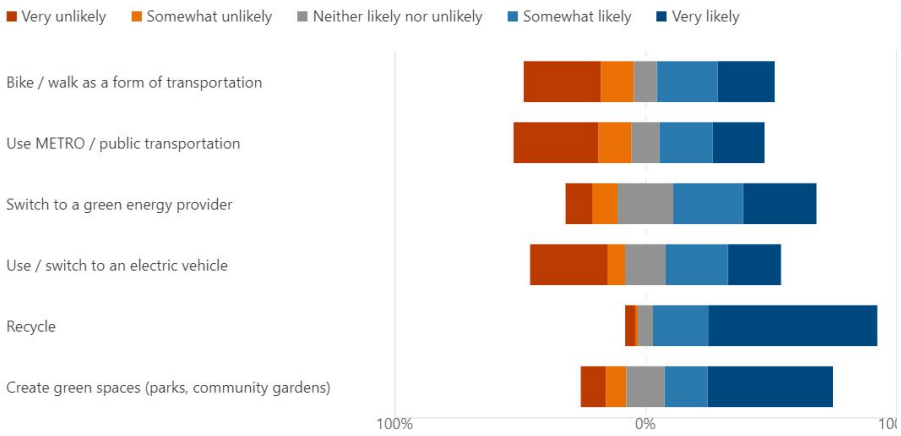


Spanish results

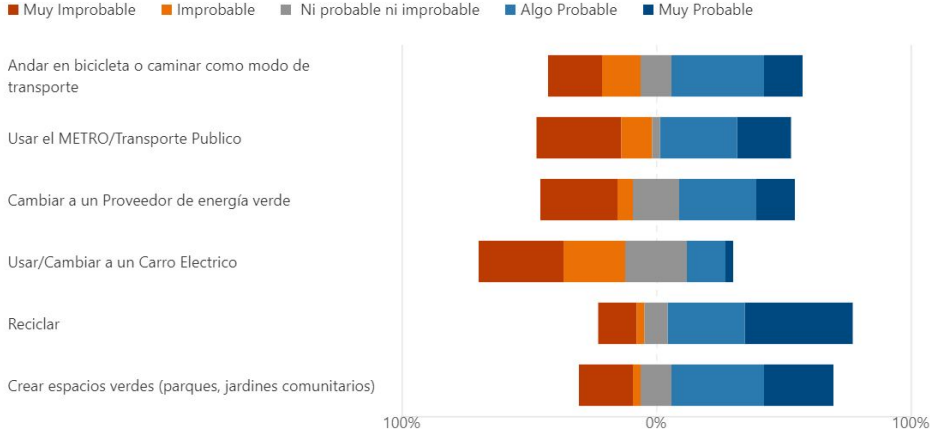


How likely are you to take the following green actions?

English results



Spanish results



What are some barriers that prevent you from making green upgrades? (eg. switching to a solar/wind/renewable energy source, using public transport, etc.) (select two)

English results

Non- homeowner	43
Cost	59
Time and effort	32
Not enough benefits	11
I don't know enough about this	24



Spanish results

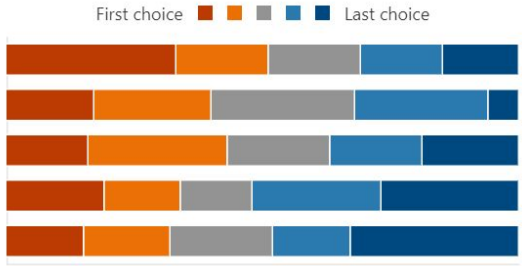
No soy dueño de casa	15
Costo	15
Tiempo y Esfuerzo	5
Los beneficios de cambiar no ...	1
No se le sufficiente para respo...	2



Rank these community goals from highest to lowest priority (1st being highest, 5th being lowest)

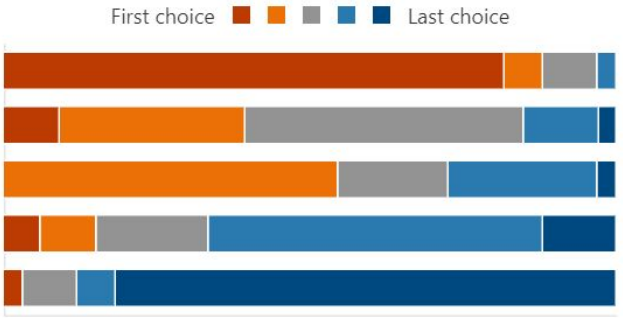
English results

Rank	Options
1	Improving air quality
2	Making energy efficient/mone...
3	Expanding forms of public tra...
4	Switching from fossil fuels (co...
5	Accessing affordable groceries



Spanish results

Rank	Options
1	Mejorar la calidad del aire
2	Hacer actualizaciones ecológic...
3	Expander las formas de transp...
4	Cambiar de combustibles fósil...
5	Accesso a un Super Mercado







Observations

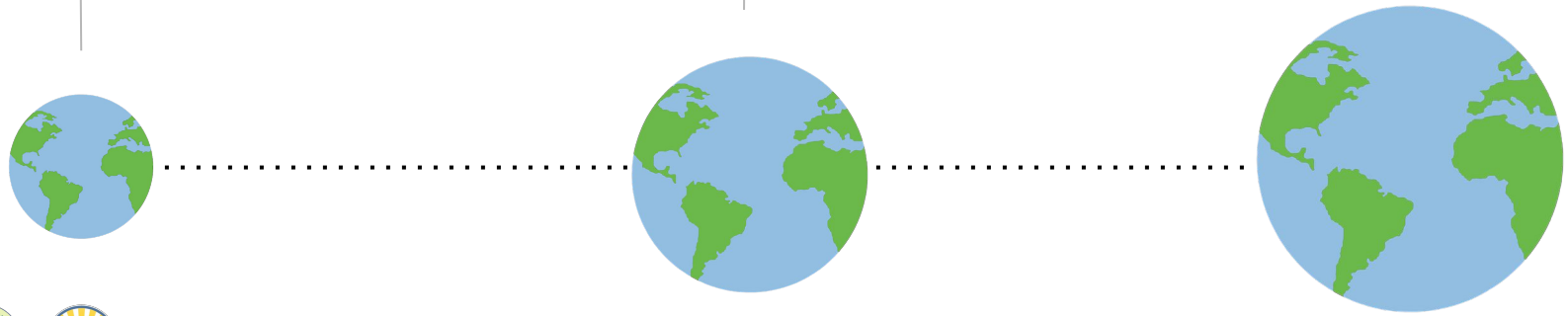
- One on one conversations are pivotal
- Conversation format works best
- Easy to digest and language availability
- Continue raising awareness about HCAP

Recommendations

Funding for Sustainable Outreach Materials

Investment in Green Workforce Development Programs

Funding for Six Full Time Climate Ambassadors



Questions?

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